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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/538,971 | 06/14/2005 | Gerhard Heitze | HM-638PCT | 9486 |
| 40570 7590 11/16/2007 FRIEDRICH KUEFFNER 317 MADISON AVENUE, SUITE 910 NEW YORK, NY 10017 | | | EXAMINER DONDERO, WILLIAM E | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3654 | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 11/16/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/538,971

Applicant(s)

HEITZE ET AL.

Examiner

William E. Dondero

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rockstrom et al. (US-2985398) in view of Cohn (US-2928621). Regarding Claims 1 and 3-4, Rockstrom discloses a coiler for rolled strip which comprises at least one driven troughed roller 64,65,71,55 for turning a coil during coiling or uncoiling of a rolled strip and a roller table upstream or downstream from the coiler, wherein the troughed roller is designed with an elastically deformable outer collar 55 wherein the outer collar is uniformly supported by support members 71 that are spring-tensioned from the inside against the outer collar and mounted in the outer collars with pretensionable spring force (Figures 1-9). Rockstrom et al. are silent about the spring-tension being applied by disk springs designed with curved contact surfaces to adapt them to the inner circumference of the outer collars. However, Cohn discloses a roller in which outer collar segments 16,18,20 are provided with spring-tension by disk springs 70 designed with curved contact surfaces to adapt them to the inner circumference of the outer collars (Figures 1-8 and Column 4, Lines 29-36). Because both Rockstrom et al. and Cohn teach spring-tensioning outer collars of rollers for coiling devices, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute

the spring disks of Cohn for the support material of Rockstrom et al. to achieve the predictable result of spring-tensioning the outer collar. Regarding Claim 2, Rockstrom et al. disclose a bearing surface of the troughed roller is formed by a series of adjoining outer collars 55 of different diameters (when loaded under the force of a coil, see Figure 7) which surround a core 64 of the troughed roller and are uniformly supported in such a way by means of support members 71 that are spring-tensioned (by rubber spring 66, see Column 6, Line 72 – Column 7, Line 37) from the inside against the outer collars that they act on the contact surface of the troughed roller with the coil over its entire longitudinal extent with uniform contact pressure (Figures 1-9). Regarding Claim 5, Rockstrom et al. disclose the support members are mounted in the outer collars with pretensionable spring force (by rubber spring 66, see Column 6, Line 72 – Column 7, Line 37) (Figures 1-9, Column 6, Line 72 – Column 7, Line 37). Regarding Claim 6, Rockstrom et al. disclose to compensate a load-related flexure of the troughed roller, which can be calculated or empirically determined, the outside diameters of the outer collars increase towards the middle of the troughed roller (Figures 1-9). Regarding Claim 11, Rockstrom et al. disclose the troughed roller comprises a solid central shaft 65, a middle collar 64 on the shaft for holding support members that can be spring tensioned (by rubber spring 66, see Column 6, Line 72 – Column 7, Line 37), and an outer collar 71 with an outer support collar 55 for supporting the load (Figures 1-9, Column 6, Line 72 – Column 7, Line 37). Regarding Claim 12, Rockstrom et al. disclose the contact surface, especially concave contact surface, that forms on the coil

during the uncoiling can be automatically adapted to the usually cambered circumference of the coil by means of the elastically yielding outer collars (Figures 1-9).

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rockstrom et al. (US-2985398) in view of Cohn as applied to claims 1-6 and 11-12 above, and further in view of Frye et al. (US-4541585). Regarding Claims 7-8, Rockstrom et al. is silent about the adjoining outer collars being provided with an oblique transition and a slight camber. However, Frye et al. discloses a roller with yieldable outer collars 14 having an oblique transition and a slight camber (Figure 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the oblique transition and slight camber of Frye et al. to the outer collars of Rockstrom et al. to allow the collars to expand without interfering with each other under the load of the coil.

Response to Arguments

With respect to Applicant's arguments starting on page 10, line 9 to page 10, line 22, Applicant argues Rockstrom et al. does not disclose an outer uniformly supported by support members that are spring-tensioned from the inside by disk springs against the outer collar. Applicant's arguments with respect to claims 1, 2, 5, 6, 11, and 12 have been considered but are moot in view of the new ground(s) of rejection.

With respect to Applicant's arguments starting on page 10, line 23 to page 11, line 13, Applicant argues the combination of Rockstrom et al. and Cohn does not disclose an outer collar uniformly supported by support members that are spring-tensioned from the inside by disk springs against the outer collar. Applicant's

arguments have been fully considered but they are not persuasive. As advanced above in the 35 USC 103(a) section, Rockstrom discloses an outer collar uniformly supported by support members that are spring-tensioned from the inside against the outer collar. Cohn discloses using a disk spring to apply spring-tension to an outer collar. Therefore, the combination of Rockstrom et al. and Cohn teaches the coiler device as presently claimed.

With respect to Applicant's arguments starting on page 11, line 14 to page 12, line 4, Applicant argues the combination of Rockstrom et al. and Frye et al. does not disclose an outer uniformly supported by support members that are spring-tensioned from the inside by disk springs against the outer collar. Applicant's arguments with respect to claims 7-10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment, including the addition of the limitation, "wherein the outer collar is uniformly supported by support members that are spring-tensioned from the inside by disk springs against the outer collar" (Claim 1, Lines 6-8) necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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10/538,971
Art Unit: 3654

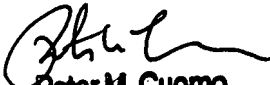
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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William E. Dondero whose telephone number is 571-272-5590. The examiner can normally be reached on Monday through Friday 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Peter M. Cuomo
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/WED/